NEW YORK STATE DEPARTMENT OF TRANSPORTATION MATERIALS BUREAU ALBANY, NY 12232 **MATERIALS METHOD**	MATERIALS METHOD: NY 26 ISSUE DATE: MARCH 1985 Supersedes:
SUBJECT: SAMPLING AND STOCK LOT CONTROL OF TWO COMPONENT EPOXY PAVEMENT MARKINGS	
APPROVED: James J. Murphy JAMES J. MURPHY, DIRECTOR, MATERIALS BUREAU	CODE: 7.42-1-26

I. Introduction

This method describes the specific procedures for the sampling and stock lot control of two component epoxy pavement markings manufactured for Department projects. It is comprised of an inventory control system whereby the epoxy pavement markings, a two component system, are accepted in stock lot quantities at the manufacturing location. Each stock lot shall be composed of sufficient quantities of each of the two components of the system which when combined at the ratio recommended by the manufacturer, will provide a durable pavement marking. The control system is implemented by sampling material to be manufactured for Department projects as it is formulated and canned. After sampling and proper identification, through the use of Department seals, the material is tested by the Department. If found acceptable, it is identified as such and released for shipment to Department projects as required.

For purposes of quality assurance testing, material is considered for acceptance on a lot basis, where a given lot is comprised of samples of both Components A and B. However, it is not necessary to either ship or use material on a lot basis. Any accepted component A may be used with any accepted component B produced by the same manufacturer, without regard to lot number.

II. Definitions

1. Manufacturer

A company actually engaged in the production of two component epoxy pavement markings at a given location.

2. Department

The New York State Department of Transportation.

3. Materials Bureau

A facility of the New York State Department of Transportation which may be contacted as follows:

Director, Materials Bureau
New York State Department of Transportation
Building 7A - Room 200
1220 Washington Avenue
Albany, New York 12232

or telephoning the Materials Administration Office of the Materials Bureau at (518) 457-5642.

4. Inspection Authority

An office designated by the Materials Bureau as responsible for inspection control on behalf of the Department at specific manufacturing locations.

5. Plant Inspector

An individual employed by the Inspection Authority and approved by the Materials Bureau to function on inspection assignments at the manufacturers on behalf of the Department.

6. Project Inspector

An individual assigned by the Department's Project Engineer to function on inspection assignments at the project site.

7. Two Component Epoxy Pavement Markings

A two component system consisting of pigment and epoxy resin (Part A) and reactive catalyst (Part B) which, when combined at the ratio recommended by the manufacturer, provides a durable pavement marking material.

8. Batch

A batch shall consist of a specific component (either Part A or Part B) of the material which is canned at one time from a single pouring tank. This may be the combination of two or more mix tanks that have been completely blended in the pouring tank, but may never represent more than a single pouring tank, filled once. Each batch of each component is assigned a unique batch number by the manufacturer.

9. Lot

A lot shall consist of a maximum of two batches, one of each component (Part A and Part B) which, when combined in the ratio recommended by the manufacturer will provide a durable pavement marking. When the two components are to be combined at a ratio of 2:1 (2 parts A to 1 part B), it is permissible for a single batch of the Part B material to be included in a maximum of two lots.

This may only occur when the batch size of the Part B material is in excess of the quantity required to be combined with a batch of the Part A material from a single individual lot. The overage of that batch may then be included in a separate lot containing a batch of the Part A material in the proper proportion.

10. Containers

Strong metal containers for packaging epoxy paint products furnished in five gallon, thirty gallon or fifty-five gallon sizes. Any other type packaging must have the prior approval of the Materials Bureau.

a. Five gallon pails are of the type using covers with or without lugs with no openings or spouts. The cover shall be secured with either a lever lock ring closer or a bolt closer containing matching eyelet holes for the application of a sealing wire.

b. Thirty gallon and fifty-five gallon drums are open head style with no bung holes. Open head drums must have bolt or lever lock ring closers, with matching eyelet holes for the application of a sealing wire.

11. Seals

Tape and metal devices, as described below, to insure content security of packages used for epoxy pavement marking material. These seals are furnished to the Inspector by the Materials Bureau.

a. Red Tape Seal
A red tamper-proof tape seal imprinted "N.Y.S. D.o.T. Sampled".

b. Green Tape Seal
A green tamper-proof tape seal imprinted "N.Y.S. D.o.T. Accepted".

c. Red Metal Seal
A red metal tamper-proof seal imprinted "N.Y.S. Sampled".

d. Green Metal Seal
A green tamper-proof seal is imprinted "N.Y.S. Accepted".

12. Forms

The following forms are published and issued by the Department for use by the Materials Bureau and Inspection Authorities.

a. BR-240 Sample and Acceptance Transmittal
This form transmits the inspector's sample information to the Materials Bureau and, upon validation, conveys acceptance action to the inspector. Detailed instruction for proper completion and transmittal are contained in Materials Method N.Y. 18.1.

b. BR-241, Transmittal Envelope
This is a heavy duty envelope used to contain the form BR-240.

NYSDOT
Library
50 Wolf Road, POD 34
Albany, New York 12232

13. Sample

A sample shall consist of a minimum of a one-quart can taken during the canning process from each batch. When the manufacturer's recommended mixing ratio is 2:1 (Part A to Part B) the sample of the Part A material will consist of two quarts and the Part B material one quart.

III. Evidence of Acceptability

ACCEPTED EPOXY PAVEMENT MARKINGS SHALL NOT BE APPLIED ON DEPARTMENT WORK AFTER SIX MONTHS FROM THE DATE OF MANUFACTURE.

1. The appearance of the Brand Name, as well as the supplying Company's Name and Location on the Department's Approved List of Epoxy Reflectorized Pavement Markings.

2. Each container sealed with one red metal seal and one green metal seal on wires running through the matching eyelet holes on the lever lock closer or bolt closer.

3. Presence of the following identifying data on each container.

   a. Name of Product
   b. Item Number
   c. Lot Number
   d. Batch Number
   e. Test Number
   f. Date of Manufacture
   g. Date of Expiration of Acceptance
   h. The Statement (as appropriate)
      Part A - Contains Pigment & Epoxy Resin
      Part B - Contains Catalyst
   i. Quantity
   j. Mixing Proportions, Application Temperature and Instructions for Use
   k. Safety Information
   l. Manufacturer's Name and Address

IV. Steps In Procedure

Responsibility	Action
Materials Bureau	1. The Department will designate an Inspection Authority to perform the duties detailed herein for each manufacturing location appearing on the Department's Approved List of Epoxy Reflectorized Pavement Markings. The manufacturer will be notified by the Materials Bureau of the Inspection Authority designated.

Responsibility	Action
Manufacturer	2. Schedules to manufacture a lot of Epoxy Pavement Marking for Department work which will include a minimum of one batch of each of the two components. Note: It is not required that the manufacturer produce each component in the lot concurrently, but acceptance consideration will only be determined on a lot basis. Therefore if only one component is manufactured and sampled, it will not be transmitted for testing until the matching component is sampled and canned.
	3. Assigns a batch number to each batch in accordance with the definition of batch.
	4. Notifies the Inspection Authority designated by the Department detailing the components to be batched (Part A, Part B or both) and the quantity of each. This notification shall be made at least 48 hours in advance of the time he plans to can the batch of epoxy marking material.
Inspection Authority	5. Determines the next consecutive lot number to be assigned should it be necessary. Necessity will be determined from the information received by the manufacturer regarding the components and quantities to be batched (Part A, Part B or both).
	6. Schedules an Inspector to be at the manufacturing plant at the time designated for the canning of the epoxy marking material.
Manufacturer	7. Manufactures the batch of epoxy pavement marking material.
Plant Inspector	8. Arrives at the manufacturing plant and verifies the manufacturer's information regarding the components to be batched (Part A, Part B or both) and the approximate quantities.

Responsibility	Action
Plant Inspector (continued)	9. Visually inspects the pouring tank to insure that all material to be canned comes from that tank. Note: If the pouring tank contains material from two or more mix tanks, verifies that the pouring tank has mixing equipment.
	10. Visually determines the quantity of material in the mixing tank.
	11. Insures that the batch number for that batch to be canned is either already marked on the side of the containers, or the proper equipment is available to mark the cans as soon as they are filled.
Manufacturer as Witnessed by the Inspector	12. Cans the batch of material a. If not previously performed, indelibly marks or labels the side of each can with the batch number. b. Applies bolt or lever lock ring closers to each can.
	13. Assigns the next consecutive lot number as received from the inspector in accordance with the definition of a lot. Note: If the manufacturer is batching the Part B component and would like that batch considered for acceptance in two lots, he must notify the inspector so an additional sample is taken. If this notification is not made prior to sampling, that batch will only be considered for acceptance in one lot.
Plant Inspector	14. Draws separate one-quart samples of the Part A and Part B component directly from the pouring tank pouring spout at the approximate middle of the pour. When the manufacturer's recommended mixing ratio is 2:1 (Part A to Part B) the sample of the Part A material will consist of two quarts and the Part B material one quart. All samples will be taken in the middle of the pour as detailed above.

Responsibility	Action
Plant Inspector (continued)	a. Samples should never be drawn from the first few or the last few gallons of a pour. b. Samples should be drawn directly from the pouring spout into clean one-quart friction top "paint" cans and the cover sealed with safety clips. Cans and clips shall be supplied by the manufacturer. c. When the manufacturer notifies the inspector that the Part B component will be considered for acceptance under two lot numbers, two one-quart samples shall be drawn from the approximate middle of the pour.
	15. Identifies the samples by marking the following information on the side of each can. a. Lot Number b. Batch Number c. The following statement (as appropriate) Part A - Contains Pigment & Epoxy Resin Part B - Contains Catalyst d. Item Number e. Manufacturer's name and location
	16. Seals each container in the lot by fastening a red metal seal to the ends of a wire that passes through the eyelet holes in the bolt or lever lock closer. Note: Containers shall not be sealed unless the batch number appears.
	17. Determines that the total quantity canned is reasonably close to the amount observed in the mixing tank.
	18. Determines that the batches contained in each lot (Part A and Part B) are in the proper proportion, i.e. when 2:1 Part A to Part B, there shall be two containers of Part A material for every one of the Part B.

Responsibility	Action
Plant Inspector (continued)	19. When an additional sample of the Part B component was taken and the mating Part A material has not been canned, the inspector shall seal the fully identified sample can with red tape seals and leave it with the manufacturer until such time the Part A component is sampled and canned.
	20. Completes Form BR-240 in accordance with Materials Method N.Y. 18.1 dated April, 1968. Note: List in box 16 the size and number of the containers in each batch included in the lot.
	21. Packages samples, including Form BR-240 enclosed in a BR-241 envelope and forwards to the Materials Bureau.
	22. Retains the pink copy of the BR-240 for his records.
Materials Bureau	23. Performs the required tests and accepts or rejects the lot on the basis of the test results.
	24. Indicates action on, and validates, Form BR-240.
	25. Issues green and yellow copy of Form BR-240 to the Inspection Authority. Note: Telephone requests to the Materials Bureau in advance of the normal notification of action will be honored only when received from the Inspector with the call at the expense of the manufacturer.
Inspection Authority	26. Receives green and yellow validated copies of Form BR-240 marked "Accepted" or "Rejected" from the Materials Bureau.
	27. Retains the yellow copy and transmits the green copy of Form BR-240 to the inspector.

Responsibility	Action
Inspection Authority (continued)	28. Notifies the manufacturer of action taken by the Materials Bureau and provides acceptance information for the completion of labeling. Note: If paint is Rejected, on a subsequent routine visit to the plant, the inspector will remove all red metal seals and attached wire from each container. 29. Arranges for inspection call to check labeling and to seal acceptable containers.
Plant Inspector	30. Checks that the manufacturer has indelibly labeled each container with the following information: a. Name of Product b. Item Number c. Lot Number d. Batch Number e. Test Number f. Name and Location of Manufacturer g. Date of Manufacture (The date of manufacture may be part of the batch number.) h. Date of Expiration of Acceptance i. The Statement (as appropriate) Part A - Contains Pigment & Epoxy Resin Part B - Contains Catalyst j. Quantity k. Mixing Proportions, Application Temperature and Instructions For Use l. Safety Information Note: At the manufacturer's convenience, labeling may be accomplished previous to or coincident with the application of green seals. 31. Attaches the green metal seal to the same wire already holding the red metal seal only to containers of accepted lots containing the proper labeling as indicated above.

Responsibility	Action
Manufacturer	32. Makes shipments from accepted stock lots without further documentation or supervision of the inspector. Note: The two component epoxy marking material may only be released for Department contracts identified with a specific number such as D_____. Requests for permission for releases other than to Department contracts shall be directed to the Materials Administration office of the Materials Bureau.
	33. Maintains a record of shipments of all Department accepted materials. These records shall include Department item number, test number, lot number batch numbers, quantity shipped, date shipped, and Department contract number.
Plant Inspector	34. Verifies on each routine visit the completion and accuracy of the shipment records from the green copies of the BR-240's and the stockpiled material in the yard.
	35. Notifies the Materials Bureau immediately of any disagreement between the manufacturer's records, the observed inventory and the BR-240's.
Project Inspector	36. Receives the two component pavement marking material and satisfies himself that the required seals as described under "Evidence of Acceptability" are intact on each container.
	37. Records required label information to be included in project files.
	38. Confirms acceptability of the material immediately prior to application by examining the Date of Expiration of Acceptance appearing on each container.

01506
LRI